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APPLICATION NO		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,616	-	02/07/2002	Hisanobu Ishiyama	81751.0028	3217
26021	· 7590	02/20/2004		EXAMINER	
HOGAN		TSON L.L.P.	NGUYEN, JIMMY H		
SUITE 1900				ART UNIT	PAPER NUMBER
LOS ANGELES, CA 90071-2611				2673	7
				DATE MAILED: 02/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	Applicant(s)					
	10/072,616	ISHIYAMA, HISANOBU					
Office Action Summary	Examiner	Art Unit					
	Jimmy H. Nguyen	2673					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 07 Fe	ebruary 2002.						
,	action is non-final.						
3) Since this application is in condition for allowar	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdray. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-21 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.						
Application Papers							
9)☐ The specification is objected to by the Examine	ır.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6.7.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: <u>See Continu</u>	ate Patent Application (PTO-152)					

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DETAILED ACTION

This Office Action is made in response to applicant's papers filed on 02/07/2002. Claims
 1-21 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 4, 10 and 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding to these claims, the disclosure, when filed, does not contain sufficient information regarding to the claimed features, "The display driver ... further comprising: a line data register which stores line data indicating ... one column; a column data register which stores column data indicating .. scan line; and an image determination data generation circuit display section", lines 1-13 of claim 4. The disclosure, page 7, lines 10-21, only discloses as much as recited in claim 4. The disclosure, page 22, line 19 through page 24, line 3, specifically page 23, last two lines, in contrast to the invention of claim 4, discloses the image determination data generation circuit, as shown in fig. 8, is <u>external</u> to the X driver IC 28 (i.e., the claimed display driver). Furthermore, the original disclosure does not contain such description and details where and how the line data and column data are generated and how the line data and column

data are respectively provided to the line data and column data registers included in the display driver, so as to enable one skilled in the pertinent art to make and use the claimed invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-3, 7-9, 13-16, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kudo et al. (JP408076721A, cited in IDS filed on 02/07/2002), hereinafter Kudo. See the attached English translation for the following rejections.

As per claims above, the claimed invention reads on Kudo as follows: Kudo discloses an electronic instrument and an associate driving method, the electronic instrument (as shown in fig. 1) comprising an image data supply circuit including a CPU (118) for supplying the still-image data (still picture data 116) (see page 5, paragraph 0014, line 14) and an animation controller (115) for supplying the moving-image data (video data 109) (see page 5, paragraph 0014, line 11), and a display unit (a liquid crystal display 121, see page 5, last line) comprising a panel (a display panel 101, page 5, paragraph 0014, line 1), a scan driver (108) (page 5, paragraph 0014, line 5) and a display driver (a data driver 102, page 5, paragraph 0014, line 2), which includes a RAM (a still picture display memory 104, page 6, paragraph 0017, lines 1-3), a line memory (a video data latch circuit 103, page 6, paragraph 0016, lines 1-3), and a selector (a data selector

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105, fig. 1) for selecting and outputting a moving-image data (a video data 109) when an image determination data (a selection signal or an animation display signal 114) is "1", or a still-image data (a still-picture data 116) when the image determination data (114) is "0" (see fig. 1, page 6, paragraph 0017, lines 3-5). Further, as noting in figs. 6 and 7, Kudo teaches the image determination data (114) generated based on a column address and a line address. Further see paragraph 0021. The elements and steps in the claims are read in the reference.

6. Claims 1-3, 7-9, 13-16, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamura (US 2002/0018058 A1).

As per claims above, the claimed invention reads on Tamura as follows: Tamura discloses an electronic instrument and an associate driving method, the electronic instrument (as shown in fig. 1) comprising an image data supply circuit (MPU 10) for supplying the still-image data and the moving-image data (fig. 1), and a display unit (20) (fig. 1) comprising a liquid crystal panel (22) (fig. 1), a scan driver (a Y-driver IC 26) (fig. 1) and a display driver (a X-driver IC 24 of fig. 1 or a X-driver IC 300 of fig. 12). See page 3, paragraph 0051. Further, as noting in fig. 12, and page 9, paragraph 0146, Tamura discloses that a display driver (300) including a RAM (a first display data RAM 310) for storing still-image data, a line memory (a second display data RAM 320) for storing moving-image data and a selector (350) for selecting and outputting a moving-image data or a still-image data according to an image determination data (an output of MPU-related control circuit 130, fig. 12, page 10, paragraph 0051), which is inherently generated based on a column address and line address (114) is "0" (see fig. 1, page 6, paragraph 0017, lines 3-5). Further, as noting in figs. 6 and 7, Kudo teaches the image determination data (114) generated based on a column address and a line address, which are

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generated on the basis of a start address SA and an address EA. Further see fig. 3, page 4, paragraph 0059. The elements and steps in the claims are read in the reference.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 5, 6, 11, 12, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo, and further in view of Uya et al. (USPN: 5,530,797), hereinafter Uya.

As per claims above, as discussed in the rejection above, Kudo discloses the RAM (104) for storing the still-image data and the selector (105). Accordingly, Kudo discloses all the limitations of these claims except that the Kudo RAM (104) does not store the image determination data, as recited in these claims.

However, Uya discloses a conventional electronic equipment, as shown in fig. 8, comprising a video RAM unit (corresponding to the claimed RAM) including a video RAM (1) for storing still-picture image data and a video RAM (key plane memory 34) for storing the image determination data (key data, co. 2, lines 4-11). See col. 1, lines 40-54. Further, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to recognize that the benefit of using the memory for storing the image determination data is to reduce the burden for the CPU operating under time-sharing/multi-task operating system, and to increase the processing speed of displaying images. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to substitute a video

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RAM unit of Uya for the Kudo RAM (104) because this would reduce the burden for the CPU

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and increase the processing speed of displaying images.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

JHN

February 17, 2004

Jimmy H. Nguyen

Examiner

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